

" PHENIX WEEKLY PLANNING



5/30/2013 Don Lynch

This Week

- Run 13 Continues: run support
- No Scheduled Maintenance this week:
- Ethane Tube Trailer Upgrade Continues: Procedure Approval
- mRPC Test Lab (Formerly RPC Factory): Walkthru done, actionitems addressed, procedure approval
- VTX strip pixel stave re-design prototype evaluation
- Continue sPHENIX support
 - HCal prototype
 - EMCal prototype design continuing
- MPC-Ex design for run 14
- Future IR evolution modeling STAR and PHENIX eRHIC upgrades to be



Next Week

- Run 13 Continues: run support
- No Scheduled Maintenance next week:
- mRPC Test Lab (Formerly RPC Factory): begin operations
- VTX strip pixel stave re-design prototype performance testing
- Continue sPHENIX support
 - HCal prototype
 - EMCal prototype design continuing
- MPC-Ex design for run 14
- End of Run Party (Thursday June 6)
- ESRC Shutdown work review
- Future IR evolution modeling



PHENIX



Ethane Trailer Project:

Procedure Done, After plumbing completed, preliminary walkthru. Final walkthru when 1st trailer arrives before run 14



New Gas Analyzer Project













mRPC Test Lab Project



Procedures done, walkthru action items addressed, ready to begin operations







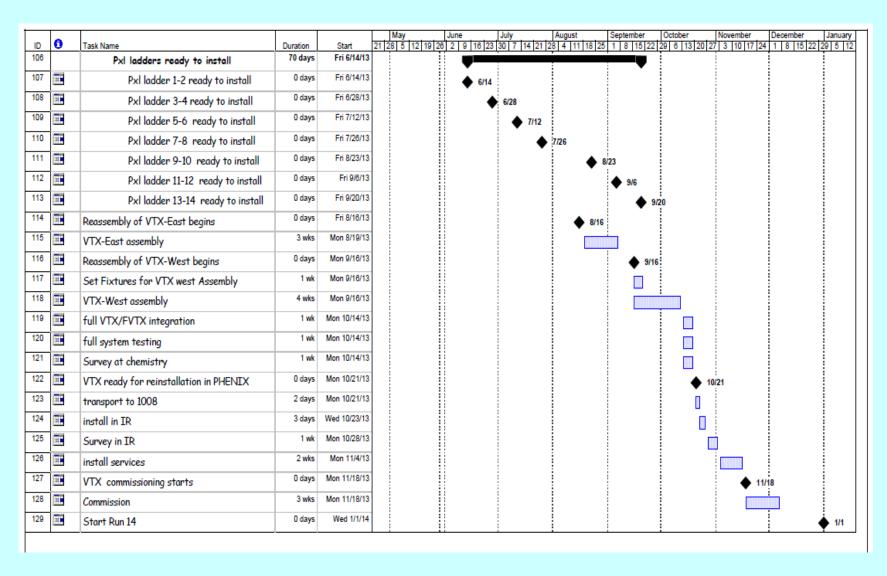
1st preproduction test article assembled, evaluated, production parts ordered, 3 more preproduction test articles in progress, performance tests this week



ID	0	Task Name	Duration	Start	21 2	May 28 5 1	12 19 2	June 6 2 9 16 2	July 3 30 7 14 2	Ai 21 28	ugust 4 11 18 25	September 1 8 15 22 2	October 29 6 13 20 27	November 3 10 17 24	December 1 8 15 22 2	January 29 5 12
1		VTX/FVTX 2013 Re-Building Schedule	112 days	Thu 4/25/13	A,					Ŧ		_				
2		Remove VTX east strppxls	0 days	Thu 4/25/13	♦	4/25										
3		Evaluate leaks	0 days	Thu 4/25/13	٠	4/25										
4		Design Improved Strppxl stave to improve	0 days	Thu 4/25/13	♦	4/25										
5		remove, clean and test SMs from east str	0 days	Thu 4/25/13	♦	4/25										
6		order strpxl prototypes	0 days	Thu 4/25/13	♦	4/25										
7		receive prototype parts and fixtures from	14 days	Thu 4/25/13												
8	III	inspect prototype parts (Rachid flatness n	7 days	Wed 5/15/13												
9	■	Build proto stppxl staves	5 days	Fri 5/24/13)								
10	==	order production strpxl stave core	1 wk	Mon 5/20/13												
11	⊞	order production strpxl stave facesheets	1 wk	Mon 5/20/13												
12	⊞	assign workspace	15 days	Mon 5/13/13		[
13	■	1st art perf. testing (press, th cycl, th per	10 days	Mon 5/27/13												
14	■	set up factory for mass production	3 wks	Mon 6/3/13												
15		receive production parts	43 days	Wed 5/22/13			▼									
16	⊞	Material procurement	4 wks	Wed 5/22/13												
17	⊞	1st Article Delivery	0 days	Wed 6/19/13				♦ 6	119							
18	⊞	1st article inspection	3 days	Wed 6/19/13												
19	⊞	Production staves 1st half	2 wks	Mon 6/24/13												
20	■	Production staves balance	2 wks	Mon 7/8/13												
21	■	Production stave covers	3.4 wks	Mon 5/27/13												
22	⊞	End of Run-13	0 days	Mon 6/10/13				♦ 6/10								
23	⊞	FVTX Post Run Tests in IR	5 days	Mon 6/10/13												
24	⊞	remove VTX/FVTX east from IR to CHEM	19 days	Fri 6/7/13												
25	⊞	disassemble VTX/FVTX east at Chem lab	1 wk	Mon 7/8/13												
26	⊞	extract FVTX east and transport to PHVS		Mon 7/15/13					1							
27	⊞	FVTX east eval, trblshtg & repairs as requ	4 wks	Mon 7/15/13						•						
28		Stripixel East	40 days	Mon 7/8/13					—	1	,	'				
29		Assemble East Strpxl stave	30 days	Mon 7/8/13					—		_					
30	⊞	assemble strpxl stave 1-2	1 wk	Mon 7/8/13												
31	■	assemble strpxl stave 3-4	1 wk	Mon 7/15/13												
32	II	assemble strpxl stave 5-7	1 wk	Mon 7/22/13												
33	II	assemble strpxl stave 8-10	1 wk	Mon 7/29/13						ф						
34	III	assemble strpxl stave 11-15	1 wk	Mon 8/5/13						[
35	II	assemble strpxl stave 16-20	1 wk	Mon 8/12/13												

ID	0	Task Name	Duration	Start	May 21 28 5 12 19 2	June 8 2 10 148 22	July	August	September	October	November	December 1 8 15 22 29	January
36	<u> </u>	Attach Sensors to East strpxl stave	30 days	Mon 7/15/13	21 20 3 12 18 2	0 2 8 10 23	30 7 14 21 2	0 4 11 10 23	1 0 13 22	28 0 13 20 21	3 10 17 24	1 0 10 22 2	8 0 12
37		sensors on strpxl stave 1-2	1 wk	Mon 7/15/13			m	Y					
38	1	sensors on strpxl stave 3-4	1 wk	Mon 7/22/13									
39	II	sensors on strpxl stave 5-7	1 wk	Mon 7/29/13				: 					
40	=	sensors on strpxl stave 8-10	1 wk	Mon 8/5/13			_						
41	=	sensors on strpxl stave 11-15	1 wk	Mon 8/12/13									
42	1	sensors on strpxl stave 16-20	1 wk	Mon 8/19/13									
43		Test East Strpxl ladders	30 days	Mon 7/22/13			_	_	,				
44		testing strpxl ladder 1-2	1 wk	Mon 7/22/13									
45	=	testing strpxl ladder 3-4	1 wk	Mon 7/29/13				j					
46	<u></u>	testing strpxl ladder 5-7	1 wk	Mon 8/5/13									
47	III	testing strpxl ladder 8-10	1 wk	Mon 8/12/13									
48	==	testing strpxl ladder 11-15	1 wk	Mon 8/19/13									
49	<u></u>	testing strpxl ladder 16-20	1 wk	Mon 8/26/13									
50		East Strpxl laddr ready for Assembl	25 days	Fri 7/26/13			₩.		•				
51	=	strpxl ladder 1-2 ready for assemb	0 days	Fri 7/26/13			•	7/26					
52	III	strpxl ladder 3-4 ready for assem	0 days	Fri 8/2/13				8/2					
53	III	strpxl ladder 5-7 ready for assemb	0 days	Fri 8/9/13				♦ 8/9					
54	=	strpxl ladder8-10 ready for asseml	0 days	Thu 8/15/13				♦ 8/15					
55	=	strpxl ladder 11-15 ready for asser	0 days	Fri 8/23/13				♦ 8	123				
56	=	strpxl ladder 16-20 ready for asse	0 days	Fri 8/30/13				4	8/30				
57	=	remove VTX/FVTX west from IR to CHEN	1 day	Mon 7/8/13			I						
58	⊞	disassemble VTX/FVTX west at Chem lab	2 wks	Tue 7/9/13									
59	⊞	extract FVTX west and transport to PHYS	1 day	Tue 7/23/13			I						
60	⊞	FVTX west eval, trblshtg & repairs as requ	4 wks	Wed 7/24/13									
61	⊞	extract pixel layers from west (1 & 2) put	1 wk	Wed 7/24/13									
62	⊞	remove strpxl sensors from VTX west	4 wks	Tue 7/23/13									
63		Stripixel West	35 days	Mon 8/12/13				_	_				
64		Assemble West Strpxl stave	30 days	Mon 8/19/13				7	_				
65	III	assemble strpxl stave 21-24	1 wk	Mon 8/19/13									
66	=	assemble strpxl stave 25-28	1 wk	Mon 8/26/13									
67	=	assemble strpxl stave 29-32	1 wk	Mon 9/2/13									
68	⊞	assemble strpxl stave 33-36	1 wk	Mon 9/9/13									
69	=	assemble strpxl stave 37-40	1 wk	Mon 9/16/13									
70	-	assemble strpxl stave 41-44	1 wk	Mon 9/23/13									

ID	0	Task Name	Duration	Start	May 21 28 5 12 19 26	June 3 2 9 16 23	July 30 7 14 21 2	August 8 4 11 18 25	September	October 29 6 13 20 27	November 3 10 17 24	December 1 8 15 22 2	January
71		Attach Sensors to West strpxl stave	25 days	Mon 8/12/13					_				
72	III	sensors on strpxl stave 21-24	1 wk	Mon 8/12/13					Ť				
73	III	sensors on strpxl stave 25-28	1 wk	Mon 8/19/13									
74	=	sensors on strpxl stave 29-32	1 wk	Mon 8/26/13									
75	=	sensors on strpxl stave 33-36	1 wk	Mon 9/2/13									
76	=	sensors on strpxl stave 37-40	1 wk	Mon 9/9/13									
77		Test West Strpxl ladders	25 days	Mon 8/19/13				_	_				
78		testing strpxl ladder 21-24	1 wk	Mon 8/19/13									
79	=	testing strpxl ladder 25-28	1 wk	Mon 8/26/13				_					
80	III	testing strpxl ladder 29-32	1 wk	Mon 9/2/13									
81	III	testing strpxl ladder 33-36	1 wk	Mon 9/9/13									
82	III	testing strpxl ladder 37-40	1 wk	Mon 9/16/13									
83		Strpxl laddr ready for Assembly	20 days	Mon 8/26/13					_				
84	III	strpxl ladder 21-24 ready for asse	0 days	Mon 8/26/13				•	8/26				
85	=	strpxl ladder 25-28 ready for asse	0 days	Mon 9/2/13					9/2				
86	=	strpxl ladder 29-32 ready for asse	0 days	Mon 9/9/13					9/9				
87	=	strpxl ladder 33-36 ready for asse	0 days	Mon 9/16/13					♦ 9/16				
88		strpxl ladder 37-40 ready for asse	0 days	Mon 9/23/13					♦ 9	9/23			
89		Pixel	85 days	Mon 5/27/13	■				_				
90		Repaired ladders shipped from Japar	55 days	Mon 5/27/13									
91	III	Repaired ladders 1-4 shipped from	1 wk	Mon 5/27/13	ı	j							
92		Repaired ladder 5 shipped from Ja	1 wk	Mon 6/10/13									
93	III	Repaired ladders 6-7 shipped from	1 wk	Mon 6/24/13									
94		Repaired ladders 8-9 shipped from	1 wk	Mon 6/24/13									
95		Repaired ladders 10-11 shipped fro	1 wk	Mon 8/5/13									
96		Repaired ladders 12-13 shipped fro	1 wk	Mon 8/5/13									
97	<u></u>	Repaired ladders 14 shipped from (1 wk	Mon 8/5/13									
98		PxI ladder testing	80 days	Mon 6/3/13					_				
99	III	Pxl ladder 1-2 testing	2 wks	Mon 6/3/13									
100	==	Pxl ladder 3-4 testing	2 wks	Mon 6/17/13									
101	=	Pxl ladder 5-6 testing	2 wks	Mon 7/1/13									
102	=	Pxl ladder 7-8 testing	2 wks	Mon 7/15/13									
103	=	Pxl ladder 9-10 testing	2 wks	Mon 8/12/13									
104		Pxl ladder 11-12 testing	2 wks	Mon 8/26/13									
105	III	Pxl ladder 13-14 testing	2 wks	Mon 9/9/13									







Existing vacuum bellows anti-squirm In MPC S Cavity



Proposed vacuum bellows antisquirm in MPC S Cavity to accommodate MPC-Ex

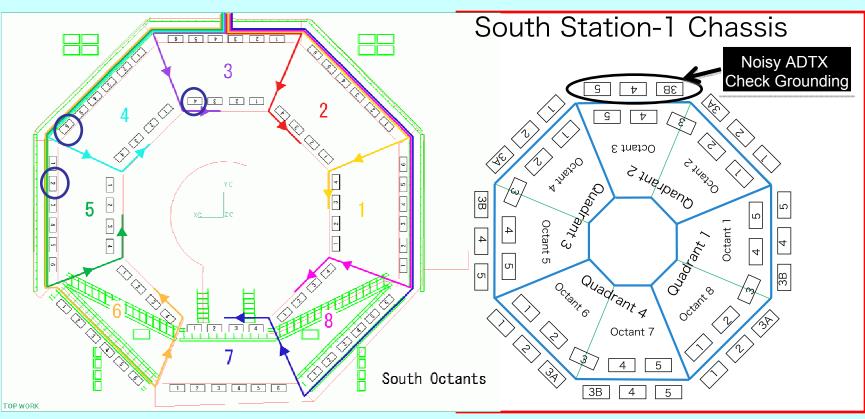




1st Tungsten Plate received: Inspection OK

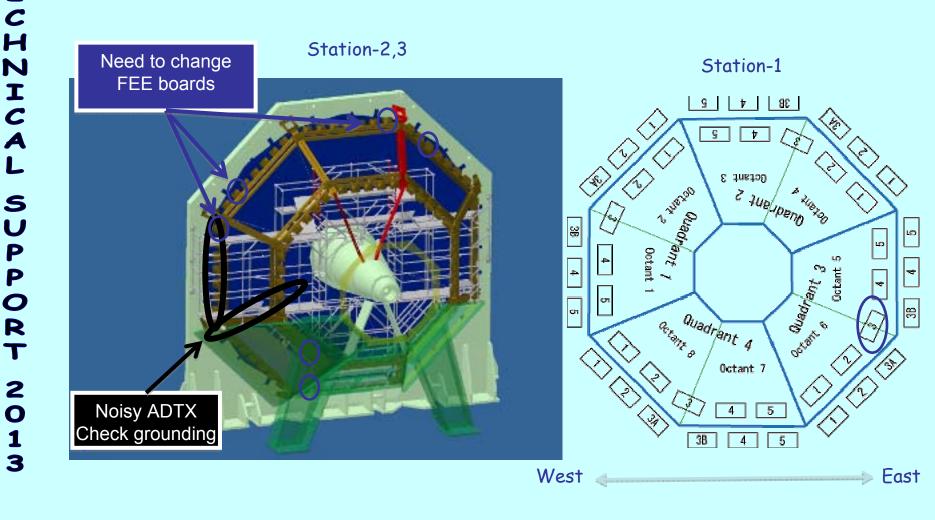
MuTr South Arm Areas to be accessed

Station-2,3



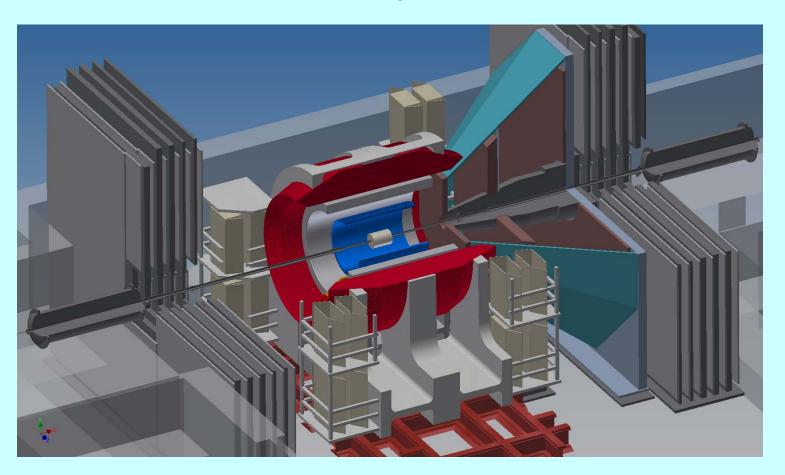


MuTr North Arm Areas to be accessed





sPHENIX



Model updated with BABAR magnet

2013



S.ARIS SPACE RACE SPACE

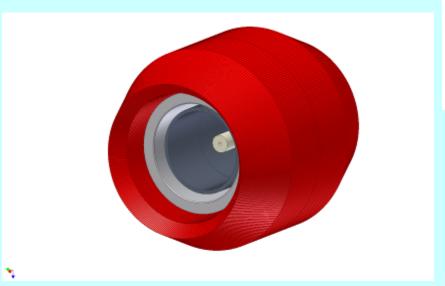
sPHENIX Proposed Upgrade

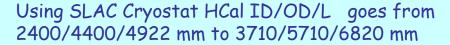
Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

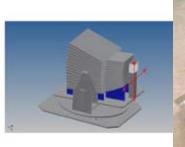
Prototype HCal and EMCal in progress

Bid packages for Hcal steel and scintillators in progress to be issued this week

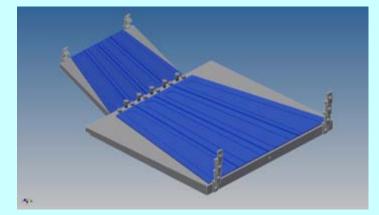
Possible magnet change to available SC solenoid from SLAC. Will change all detector parameters



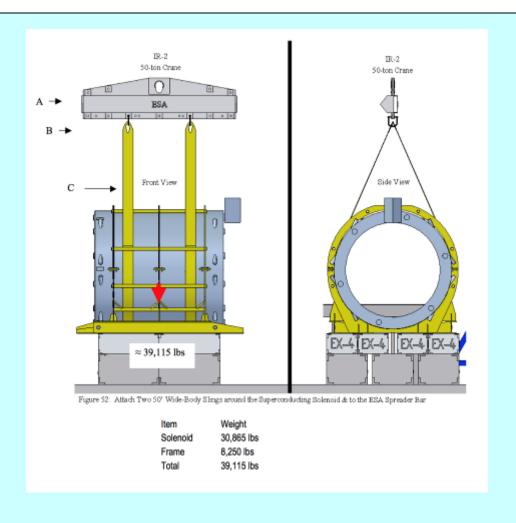




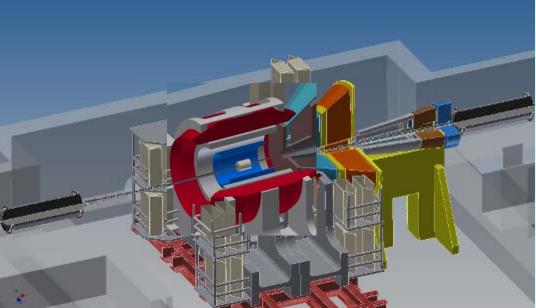




Shipping and lifting

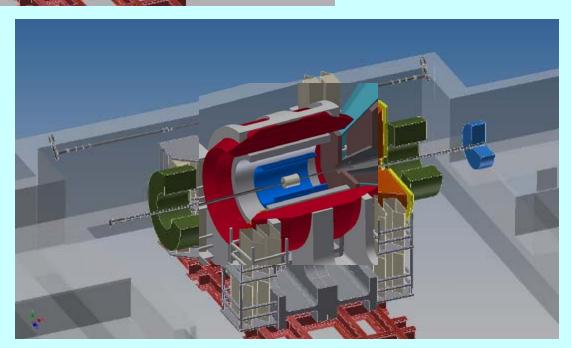






fsPHENIX & ePHENIX Models with BABAR based sPHENIX

ePHENIX



Major Projects This Summer:

- VTX repairs/upgrades/general maintenance (Mike L.)
- DC East Window Replacement (Kenny J.)
- MPC-Ex Initial (partial) Installation (Jim L.)
- mRPC Tests in mRPC Test Lab (formerly RPC Factory) (Frank T.)
- sPHENIX Prototypes assembly & tests (All)
- MuTr troubleshooting and Repairs (Chris P.)
- Window Washer Winch upgrade (Jim L.)

Other Mechanical (TBD)

Other Electrical Projects

- HVAC Controls Upgrade (Frank T.)
- Complete Window Washer Controls Upgrade (Frank T.)

Other Electronics Projects

- Additional upgrading of ADAM system to MODBUS (Sal P.)
- Electronics research in support of sPHENIX and RATCAP (Sal P.)
- Lecroy HV comminuications upgrade (Sal P.)

Other Gas System Projects (TBD)

- RPC Gas Recirc. Upgrade (John T.)
- Drawing and Config. Control Improvements (SULI Student)

Other Infrastructure Projects (TBD)

Work Permits for 2013 Shutdown

- Start of Shutdown
- VTX/FVTX repair & Upgrade
- MPC-Ex initial/prototype installation
- DC East Window replacement
- sPHENIX prototype assembly and test setup
- MuTr troubleshooting and repairs
- Window Washer Winch replacement/upgrade
- Other TBD
- End of Shutdown/Run 14 Prep





_	Prep for 2013 shutdown	2/11-6/11/2013
T	Design, Fabricate MPC-Ex	
E	Define tasks and goals	
C	Analysis and design of fixtures, tools and procedures	
Н	Fabricate/procure tools and fixtures	
7	Tests, mockups, prototypes	
I	Receive, fabricate, modify, finish installables	
C	Review and approval of parts, tools, fixtures and procedures	
A	Assembly and QA tests	
L	VTX Strippixel redesign	In-progress
L	VTX Strippixel 1st article stave assembly	5/3/2013
5	VTX Strippixel 1st article qualification/performance tests	5/31/2013
U	VTX strippixel stave production	5/20-8/30/2013
P	VTX Strippixel sensor reclamation	4/1-8/30/2013
P	VTX Strippixel ladder assembly	6/1-9/27/2013
	Pixel Ladder repairs	4/1-9/27/2013
ORT	End of Run Party	6/6/2013
K	Run 12 Ends	6/11/2013
	Shutdown Standard Tasks	6/11-7/19/2013
2	 Open wall, disassemble wall, Remove MuID Collars, 	
5	· Move EC to AH, etc.	
1	VTX/FVTX Post run tests	6/11-6/14/2013
0 1 3	Disassemble VTX/FVTX services	6/17-7/3/2013
3	July 4 th Holiday	7/4-7/2013
	Remove VTX/FVTX and transport to Chemistry Lab	7/8/2013
	Remove Lampshade MMS, East Vertical	7/8-12/2013
	Assemble, Test and Install MPC-Ex (Partial, location TBD)	7/22-10/1/2013
	T 100 10010	

12/24-25/2013

1/1/2014

1/2/2014



Christmas Holiday

Start run 14

New Year's Day Holiday

TECH MuTR Troubleshooting, maintenance and repairs 7/22-9/27/2013 Summer Sunday (8/11) Prep and teardown 7/29-8/6/2013 ZIUAL Summer Sunday (RHIC) 8/4/2013 DC East Window Upgrade and Related Repairs 8/19-9/27/2013 sPHENIX HCal Prototype Assembly/test 8/19-10/15/2013 Labor Day Holiday 9/2/2013 Repair upgrade, reassemble VTX/FVTX (pixels and strip-pixels) 7/11-10/13/2013 Test, survey (at Chemistry and IR) and re-install VTX/FVTX 10/16-10/27/2013 Other detector maintenance as required As required Infrastructure maintenance as required As required TBD prototype tasks As required Pre-run commissioning and prep for run 14 11/1-12/31/2012 Veterans Day, Lab Holiday 11/11/2013 Prep for EC roll in 11/1-11/9/2013 Roll in FC 11/10-11/12/2013 Prep IR for run 11/1-11/30/2013 Thanksgiving Holidays 11/28-29/2013 Pink/Blue/White sheets 12/14-12/31/2013

5/30/2013 22



CPR Training: The next 2 CPR Training sessions are closed (full). Next available training dates are: Friday June 21 (1:30-4:30 PM and Wed. June 26 1:30-4:30)

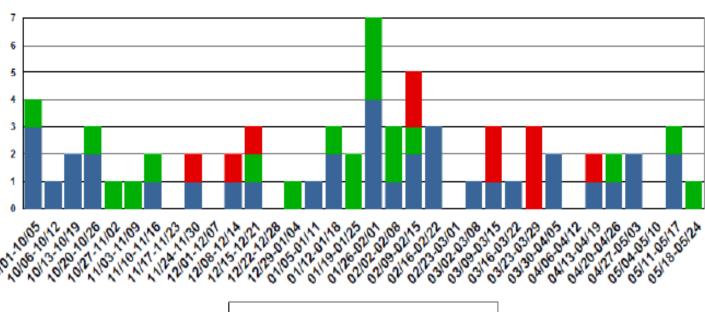
Infrastructure:

Door finally replaced

Railings for trailer offices: in progress



Injuries Per Week (FY) As of 5/24/2013



■ DART ■ Recordable ■ First Aid

Injury Status:

FY13 YTD: DART – 11, TRC – 30, First Aid – 36 FY12: DART – 17, TRC – 35, First Aid – 70 FY11: DART – 30, TRC – 44, First Aid – 45

FY13 Injury Listing: https://intranet.bnl.gov/esh/shsd/seg/Occlni/BNLInjuries.aspx

Recent Injuries							
5/18/13	Recordable	An employee slipped while walking in sand, injuring their lower arm. The employee received prescription medication at the ER, making this recordable.					
5/17/13	First Aid	An employee injured a leg dismounting from a vehicle. At the clinic, first aid was given.					



Recent Even	Recent Events						
5/22/13	Non- Reportable	A BNL Contractor has a contract with BNL and with the BP Solar Energy Farm. Yesterday afternoon it was noticed that the contractor moved some soil fill from the BP location to the old chemical hole soil capped area near B670. BNL expected to be notified if the contractor worked in the B670 area and the old chemical hole. There was no damage to the soil cap and no environmental impact. F&O is discussing this with the contractor to improve the work planning interfaces and prevent recurrence. (Event Link)					
5/22/13	SC-4	A refrigeration & air conditioning engineer (RCA) was in the process of recharging the Dunham Busch chiller at Building 911. During the procedure there was an unexpected release of 50-100 lbs. of R-22 refrigerant. Prior to the release, the operating pressure of the machine was 'normal'. Upon release, the RAC shut the machine off and immediately left the area. Further evaluation is forthcoming. (Event Link)					
5/22/13	Non- Reportable	A distracted employee hit the "One Way" sign located in the median of the road while driving in-bound thru the West Gate. She was driving a personal vehicle. The individual reported the incident to BNL Lab Protection. (Event Link)					
5/17/13	Non- Reportable	At approximately 5:30pm, BNL Emergency Services responded to a privately owned vehicle which veered off the road at the corner of Center St. and Bell Ave. crashing into shrubbery outside Building 421 before stopping. The building was not hit and no one was injured. (Event Link)					
5/3/13	SC-4	The South Complex initiated the repair effort on Bldg. 490 Air Handling Unit (AHU) LV-1 Motor Mounting and Motor Sled with repair services performed by Major Systems Mechanical. The South Complex AC Engineer shut down the fan and steam was secured. Red South Complex Group LOTO was applied to both systems with the respective keys and red tag stubs placed in a Group LOTO Lock Box controlled by the South Complex Multi-trade Supervisor as the Responsible Employee. Major Systems Mechanical's Worker then added his Personal LOTO to the Lock Box. The repair effort was completed on Saturday 5/4/2013, however, it was later learned that one of the two contractors who attached their Personal LOTO to the Lock Box was only trained to the Affected worker level, not to Authorized as required. (Event Link)					





Where To Find PHENIX Engineering Info







End of Run 13 Coming next week...

Time for the End of run party!

Next Thursday, June 6, at 12:30 PM



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm